

TRAFFIC RECORDS

I. PROGRAM OVERVIEW

Traffic record systems include the data elements necessary for problem identification, problem analysis, and countermeasure evaluation in all areas of traffic safety. Traffic record programs include data related to collisions and to every aspect of the program infrastructure. Data pertaining to people, vehicles, and roadways are all part of the total traffic records network.

The most common theme of the total records program is the Statewide Integrated Traffic Records System (SWITRS). Installed at California Highway Patrol (CHP) in 1974, the SWITRS provides collision-related reports to state and local agencies. Since SWITRS inception, there have been major advances in computing capabilities, rendering certain features of the SWITRS system cumbersome, time-consuming, and labor intensive. The cost and the impact of changing to an on-line system are presently being studied and system re-development is in progress.

The Traffic Accident Surveillance and Analysis System (TASAS), maintained by Caltrans, is the repository of all crash data pertaining to state and interstate highways, and includes detailed data on the location and types of roadways, as well as collisions occurring on these highways. TASAS does not include local (city or county) streets or roadway data.

Department of Motor Vehicles (DMV) maintains a large statewide computer network to record all registered motor vehicles and licensed drivers (and some unlicensed). The system generates a transcript for every person cited or arrested for a traffic violation who is subsequently convicted, or who defaults on bail and is forwarded by the courts to DMV. The resulting transcript becomes the basis for an entry into the Automated Management Information System (AMIS), even if the person arrested is not a licensed driver. If a citation is issued or an arrest is made in connection with a collision, the record of a collision involving a specific driver will be included in the file.

Advances in computer technology have enabled the DMV to establish a direct electronic link to nearly all of the municipal courts within the State. By means of this linkage, nearly all traffic court judges have access to complete and current driver histories, thereby making the penalties imposed by the court more in keeping with the actual driving record of the individual. DMV continues to expand this capability and is placing as many courts as possible on-line.

The Department of Justice (DOJ) system maintains a record of arrests made within the state, including the final disposition of each case. This record system shows all arrests, regardless of traffic involvement, and identifies specific vehicle code violations.

The Emergency Medical Services Authority (EMSA) has installed a statewide database of emergency medical conditions, including response times to collisions and subsequent treatment of collision victims. In the EMS system, all regional trauma systems store and retrieve medical data, with a certain mandated core data transmitted to the EMSA system. EMSA is trying to establish the means and methodology to track specific individuals from the collision to the emergency responder to the hospital and finally to hospital discharge. EMS linkage is necessary for the sensitivity index computation, and provides traffic engineers and traffic law enforcement personnel invaluable information on morbidity and mortality rates.

All cities and counties maintain traffic-related records, including data on local roadways. Many agencies report optimal effectiveness can be achieved by maintaining a local system that includes many of the same data elements contained in the statewide systems. A local system includes collision records, records of arrests and citations, and crash data on local streets and roads.

The geographic size of California and its large population makes the complete centralization of traffic records somewhat impractical. Therefore, various aspects of traffic records are delivered by a variety of responsible agencies. Consequently, it is more appropriate to refer to a traffic record network rather than a traffic record system.

Local agencies in California have identified specific difficulties in using SWITRS, primarily the time lag in receiving reports and the inconsistencies in the identification of local street names. For smaller cities, these problems do not represent major obstacles; but larger communities require an automated collision system to provide in part, a more timely record and a more accurate identification of crashes.

The Office of Traffic Safety (OTS) will continue to address the need for local systems by continuing to provide hardware and software to local grantees that are compatible with SWITRS. Many local agencies are implementing, or exploring the feasibility of implementing local Geographic Information System (GIS) based traffic record systems.

II. ACTION PLANS

OTS continues to implement the recommendations of the 1993 Traffic Records Assessment. With regard to this effort, as well as to the overall endeavor to provide effective records systems statewide, the advent of affordable Geographical Information Systems (GIS) has enhanced the awareness of the strong relationship between various aspects of traffic data and its potential impact on improved traffic safety. In keeping with this knowledge, the distinction between engineering and enforcement data records is vanishing, and is being replaced by more integrated and comprehensive systems. A variety of state and local agencies continue to work toward improving traffic record collection within the State of California. The "Traffic Records Council" was formed as recommended by a traffic record assessment team. The initial work plan was designed around the recommendations of that team. All major state departments producing traffic-related data are represented on the "council," including OTS. The Traffic Records Assessment team and the Traffic Records Council have not met formally for a number of years. Consequently, OTS will explore the possibility of reconvening these organizations for the purpose of measuring progress and developing new goals.

OTS remains committed to providing funds to agencies on both the city and county level to purchase fully automated collision and citation records and analysis systems. OTS is confident that once implemented these systems will decrease the agency resources needed to maintain collision and citation statistical data. These systems are also expected to reduce the frequency and possibly the severity of traffic collisions in each jurisdiction where the systems are implemented.

OTS strongly recommends that both engineering and enforcement agencies become involved in system selection, deployment and data sharing. This cooperative approach results in economies of scale (time and capital) to each of the agencies due to the system licensing and compatibility between the agencies. The GIS based collision and citation analysis program will allow agencies to conserve resources while at the same time provide

transportation engineers, public safety officers, department managers and enforcement agencies with timely, accurate and useable information upon which to base engineering, enforcement and other traffic related safety decisions.

To achieve the greatest potential for reducing fatalities and injuries, OTS recommends grantees consider the following countermeasures when preparing their project agreements (*Note: The OTS “Blueprint” contain additional recommended “best practice” countermeasures*):

- To ensure engineering and police departments have timely access to current and complete traffic data necessary to identify, isolate and analyze critical traffic safety issues.
- To utilize a shared system to sufficiently meet client/citizen information needs.
- To sponsor projects that promote the pooling of knowledge and data and resources between agencies, cities and counties.
- To advocate system interconnectivity amongst all levels of governmental Traffic Record data gathering entities.
- To build participant consensus in the development of regional automated Traffic Record systems.
- To promote the functional and economic benefits of data sharing between entities.
- To develop prototype systems that will assist in eroding the artificial territorial paradigms of the traffic engineering/enforcement communities.
- To develop automated records systems to provide timely reports and identify numbers and severity of collisions occurring at critical locations.
- To promote traffic records systems to reduce report preparation time.
- To build automated traffic records systems to reduce the time it takes to enter the incident into the system.
- To advocate automated systems that allow police department personnel to frequently receive information concerning officer assignments, citations, arrests, and high collision locations.
- To encourage the training of personnel in record processing and data retrieval and analysis.

III. TASKS

TASK 1 - PROGRAM DEVELOPMENT AND ADMINISTRATIVE COORDINATION

This task provides for the necessary staff time and expenses incurred by OTS that are directly related to the planning, development, coordination, monitoring, auditing, and evaluation of projects within this program area, and the preparation of the 2005 Highway Safety Plan. This plan includes projects that will be continued from prior fiscal years. Funding is also provided in this task for the printing of brochures and pamphlets, distributing literature and media materials developed through successful projects, or obtained from other sources. Assistance is also provided under this task to individuals to attend and participate in technology transfer workshops, training sessions, or educational meetings or conferences.

TASK 2 - DATA RECORDS DESIGN AND IMPLEMENTATION

Projects funded in this task provide the databases and data record design by which local agencies can supplement existing collision record programs with needed roadway data.

402

TR0508 - WATSONVILLE

SANTA CRUZ METRO POLICE DEPARTMENT'S HAND-HELD CITATION, COLLISION, DUI REPORT WRITING PROJECT

A multi-jurisdictional traffic safety effort will be utilized by the four local police agencies in Santa Cruz County to efficiently report collisions, DUI, and citation information; analyze high collision locations and correlate these statistics to increase enforcement activity, establish traffic controls at key critical intersections, and improve safety. The objective is to reduce officer time in traffic reporting through the implementation of in-field electronic hand-held devices, integrated with software that supports data importation, report generation, and analysis. Secondly, the project seeks to reduce staff time processing traffic citations, meeting the California Superior Court electronic file standards, and creating a graphics interface for data importation. (\$215,000)

TASK 3 - COMPREHENSIVE DATA SYSTEM DESIGN AND IMPLEMENTATION

Projects funded in this task include activities that are broadly based and encompass records systems that include law enforcement, collision investigation, traffic engineering, adjudication, and emergency medical services. It is within this task that comprehensive systems, such as GIS are funded.

**TR0401 - JUDICIAL COUNCIL OF CALIFORNIA, ADMINISTRATIVE OFFICE OF THE COURTS
IMPROVED UNIFORM BAIL AND PENALTY SCHEDULE**

The project will continue into fiscal year 2005. The project provides funds for temporary/contract personnel to develop a database and updated bail schedule. The primary goal of this project is to improve the Uniform Bail and Penalty Schedule by developing a database that includes all infraction and misdemeanor violations of the Vehicle Code that are citable and reportable to DMV. The database will be made available electronically to all California Courts. These changes will increase traffic safety by improving driver records and removing problem drivers from California's roadways through proper application of fines and penalties. (\$14,500.)

**TR0403 - DEPARTMENT OF MOTOR VEHICLES
DEVELOPMENT OF A DRIVER LICENSE APPLICATION MANAGEMENT INFORMATION SYSTEM
(STAGE II)**

The project will continue into fiscal year 2005. The project will provide funds for personnel, training, travel, and computer hardware and software. The primary goal of the project is to develop and evaluate a prototype driver license application management information system and statistical database that would provide data for use in traffic safety research studies and monitoring driver licensing program operations. (\$46,608)

402

**TR00501 – ARCATA POLICE DEPARTMENT
HUMBOLDT COUNTY ELECTRONIC CITATION PROJECT**

The department will implement the project to automate the traffic citation process. The hand held system will be used to reduce, and/or eliminate redundancies while significantly decreasing the time and resources needed to write, edit, store and manage citation records. The end result will be an increase in the productivity of the county's traffic enforcement and an overall improvement in streamlining court processes. (\$226,200)

TASK 4 - HIGH RISK DRIVER IDENTIFICATION DATA CAPTURE IMPROVEMENT PROJECTS

Projects funded under this task are primarily concerned with developing the methodology to correctly identify high-risk drivers and the subsequent development of software to allow for the tracking of the identified high-risk drivers.

157

**TR0302 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES
DEVELOPMENT OF A LONG RANGE STRATEGY AND PROCUREMENT OF A BIOMETRICS
VERIFICATION SYSTEM**

Initiated in fiscal year 2004, the project will continue into fiscal year 2005. The project provides funds for consultant services to advise DMV how to implement a Biometrics Verification System (BVS). The design will ensure that one person has only one driver's license or identification (DL/ID) number and one DL/ID number belongs to only one person. The consultant will include developing the requirements necessary to secure a contractor to develop the BVS, and to develop a plan on cleansing the 80+ million images contained in the image database. (\$250,000)

TR0201 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES**INTERNET REPORTING OR DRIVING UNDER THE INFLUENCE TREATMENT PROGRAM FORMS**

The project will continue into fiscal year 2005. The project provides funds for travel, contractual services, two database servers, two application servers, two rack setups, digital directory server two QL servers and software. Project activities include the development and implementation of an automated system that, via the Internet will allow DUI treatment program providers to report directly to DMV on the progress of individuals mandated to DUI treatment. The project goals are to expedite the update of participant driving records and notification to the offender of license suspension, revocation, restriction, or reinstatement. Due to implementation delays, this project was previously known as TR0008. (\$308,428)

TR0505 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES**DEVELOPMENT OF A CONDITIONAL LICENSING SYSTEM: WAYS TO COMPENSATE FOR DRIVING-RELEVANT IMPAIRMENTS**

This project will address the development and targeting of educational intervention programs as one component of a projected conditional licensing system that will be based on the ways in which a driver performs in the three-tier assessment system developed under the

Field - Implementation of Improved Driver Assessment System project. (\$82,531)

TR0506 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES**AN EVALUATION OF THE TRAFFIC SAFETY IMPACT OF WAIVING THE DRIVER LICENSE WRITTEN KNOWLEDGE TEST**

This project will evaluate the traffic safety impact of giving eligible license renewal applicants an at-home test or test waiver in lieu of taking an in-office test. (\$99,142)

TR0507 - DEPARTMENT OF MOTOR VEHICLES**WEB-BASED EMPLOYER PULL NOTICE (EPN) PROGRAM**

The project provides employers and regulatory agencies a means of promoting driver safety through the ongoing review of driver records of all Class 1/A, Class 2/B, transit authority, certificated, and Public Utilities Commission regulated drivers. The program is labor intensive with over 48,415 employers and 1.4 million drivers enrolled. This project eliminates the manual process by providing an electronic service delivery method. This provides timely notification to employers on driving related activities (e.g., citations, collisions, etc.) of their enrolled drivers, thereby enabling employers to promptly take remedial action. (\$846,400)

**FISCAL YEAR 2005 PROGRAM FUNDING
(TRAFFIC RECORDS)**

| Task | Title | | Major Cost Items | | | | | |
|-------------------|---|-----------------------|--|--------|--------------|--------|--------|------------------|
| 1 | Program Development and Administrative Coordination | | Personnel and Operating Expenses | | | | | |
| 2 | Data Records Design and Implementation | | Consultant Services and Computer Equipment | | | | | |
| 3 | Comprehensive Data System Design and Implementation | | Staff Salaries, Consultant Services and Computer Equipment | | | | | |
| 4 | High Risk Driver Identification Data Capture Improvement Projects | | Staff Salaries, Consultant Services and Computer Equipment | | | | | |
| Program | Task No/ | Funding Sources/Codes | | | | | | Estimated Agency |
| Code | Agency | 157 | 163 | 164 | 402 | 405 | 410 | Contribution |
| TR | 1 Local | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| | State | \$0.00 | \$0.00 | \$0.00 | \$88,189.00 | \$0.00 | \$0.00 | \$0.00 |
| TR | 2 Local | \$0.00 | \$0.00 | \$0.00 | \$215,000.00 | \$0.00 | \$0.00 | \$0.00 |
| | State | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TR | 3 Local | \$0.00 | \$0.00 | \$0.00 | \$226,200.00 | \$0.00 | \$0.00 | \$0.00 |
| | State | \$0.00 | \$61,108.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$6,806.00 |
| TR | 4 Local | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| | State | \$0.00 | \$1,336,500.76 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$923,023.00 |
| PSP TOTALS | | | | | | | | |
| LOCAL: | | \$0.00 | \$0.00 | \$0.00 | \$441,200.00 | \$0.00 | \$0.00 | \$0.00 |
| STATE: | | \$0.00 | \$1,397,608.76 | \$0.00 | \$88,189.00 | \$0.00 | \$0.00 | \$929,829.00 |